

0068811 Fact Sheet

Time Critical Removal Action to Remove a Buried Pipeline and Do Other Cleanup Work

U.S. Department of Energy - Washington State Department of Ecology - U.S. Environmental Protection Agency

The U.S. Department of Energy (USDOE) and the Washington State Department of Ecology (Ecology) have compiled and are making available documents comprising the administrative record file for a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) time-critical removal action (TCRA). This TCRA is to support activities (e.g., removal of a portion of the 200-W-42 pipeline) that facilitate the installation of a proposed barrier over the 216-U-8 and 216-U-12 Cribs. The pipeline removal and the barrier installations were evaluated in the 200-UW-1 Operable Unit Proposed Plan and Focused Feasibility Study. The proposed plan underwent public comment from May 16 through June 30, 2005.

Background

The U Plant Area is located in the Central Plateau (200 Area) of the Hanford Site. Approximately one-third mile square, the U Plant Area encompasses the U Plant Canyon Building (221-U Facility), ancillary facilities that supported the Canyon, soil waste sites and underground pipelines. It overlies part of the 200-UP-1 Groundwater Operable Unit. The 221-U Facility was used to train B and T Plant operators until 1952 at which time it was converted to include a uranium recovery process for waste from other canyon facilities. The primary liquid-waste generating processes in the U Plant Area included: uranium recovery, UO3 conversion, solvent treatment and analytical laboratory processes.

Liquid wastes were often discharged to the soil through cribs, trenches and french drains. The 216-U-8 and 216-U-12 Cribs are two waste sites located relatively close to each other in the U Plant Area. They received basically the same type of waste from the 221-U Facility although the waste stream discharged to the 216-U-12 Crib was more dilute and of lesser volume. The contaminants of concern for the 216-U-8 crib include cesium-137, nitrate and nitrite, technetium and uranium and are at measurable quantities from the surface to approximately 200 feet below the surface. Nitrate and nitrite, technetium and uranium are the contaminants of concern for the 216-U-12 crib and are at measurable quantities from the surface to approximately 235 feet below the surface. Although contaminants are detected near the surface, they pose no threat to human health and the environment.

The Administrative Record File on the Time-Critical Removal Action to Remove a Buried Pipeline and Do Other Cleanup Work is Now Available



Trench excavation between the 216-U-8 and the 216-U-12 Cribs

The 200-W-42 pipeline is a transfer line that carried liquid waste from the 221-U Facility to the 216-U-8 and 216-U-12 Cribs. It consists of a steel pipe near the 221-U Facility and a vitrified clay pipe that leads to the 216-U-8 and 216-U-12 Cribs. The vitrified clay pipe is approximately six inches in diameter, buried 8-15 feet below grade and is known to have some dislodged joints. An unplanned release occurred between U-Plant and 216-U-8 Crib spreading contamination laterally at the surface (an estimated 3-5 feet deep) to approximately 12 feet in depth. However, this will be confirmed during remedial action. If the spread and vertical extent of contamination are greater than anticipated, the Parties will use the plug-in approach and implement the remedial action that is protective of human health and the environment.

The Focused Feasibility Study for the 200-UW-1 Operable Unit, DOE/RL-2003-23, and the Proposed Plan for the 200-UW-1 Operable Unit,

Tri-Party Agreement

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DOE/RL-2003-24 evaluated cleanup alternatives for the 216-U-8 Crib, 216-U-12 Crib and the vitrified clay portion of the 200-W-42 pipeline. The preferred alternative for the two cribs was the placement of an engineered barrier while the preferred alternative for the pipeline was to remove, treat, and dispose. A 45-day public comment period (May 16 – June 30, 2005) was held on the 200-UW-1 Operable Unit Proposed Plan.

Scope of the removal action

The agencies are performing this work as a TCRA in accordance with CERCLA. There are three types of removal actions: classic emergencies, time-critical, and non-time-critical action. A TCRA is used when a cleanup action can be initiated in less than six months.

This TCRA enabled cleanup work to begin earlier to avoid adverse weather conditions that could cause delays on remediation of two high-risk waste sites. In addition, the work is being done with existing resources (e.g., trained workforce, planning, funding), fulfills a public bias for removal and will provide lessons learned that can be applied to future removal, treatment, and disposal activities. The following activities are included in this removal action:

 excavating approximately 400 feet of the 200-W-42 pipeline, sampling the pipeline trench to verify that cleanup standards are met, and then backfilling the trench area;



Trench excavation between the 216-U-8 and the 216-U-12 Cribs

- rerouting approximately 830 feet of the Treated Effluent Disposal Facility (TEDF) line and removing approximately 100 feet of the wastewater pipeline;
- removing (completely or partially) a 100-foot by 150foot concrete slab;
- · removing and sealing three vent risers; and
- relocating/removing any miscellaneous markers or utilities.

Administrative Record File Documents

The documents that comprise the Administrative Record file for this action include:

Action Memorandum (DA01059946)

Sampling and Analysis Plan (DA01538658)

Removal Action Work Plan (DA01649016)

Focused Feasibility Study for the 200-UW-1 Operable Unit (D7944638) (D7944918) (D7950655)

Proposed Plan for the 200-UW-1 Operable Unit (DA007725)

The Administrative Record Accession numbers (by which the document can be accessed) are in parenthesis. Because a public comment period was held from May 16 – June 30, 2005 on the Proposed Plan for the 200-UW-1 OU that included evaluations of the cribs and pipeline, there will be no formal public comment period on the TCRA Administrative Record file. However, should USDOE (Kevin Leary: phone: (509) 373-7285, email: Kevin_D_Leary@rl.gov) and/or Ecology (John Price: phone: (509) 372-7921, email: jpri461@ecy.wa.gov) receive informal comments, those comments will be considered in the development of future U-area waste sites cleanup documents.

The documents are available for review at the Administrative Record

Administrative Record and Public Information Repository:

Address: 2440 Stevens Center Place, Room1101, Richland, WA

Phone: 509-376-2530

Web site address: http://www2.hanford.gov/arpir/

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